

26th.—The s. s. "Bulgarian," from N. 45° 10', W. 47° 0' to N. 45° 0', W. 47° 35', from 8 a. m. to 12.30 p. m., passed several medium-sized icebergs.

27th.—The s. s. "State of Georgia," in N. 44° 5', W. 47° 20', at 6 p. m., passed two small icebergs.

FOG.

The following shows the positions of fog-areas encountered on the north Atlantic Ocean during February, 1887, as reported by shipmasters:

16th.—The s. s. "Kansas," in N. 42° 50', W. 62° 0', had dense fog from 6.15 a. m. to 10.40 a. m. The s. s. "Galileo," in N. 42° 15', W. 65° 04', had a dense fog from 5 a. m. to 10 a. m.

18th.—The s. s. "Durham City," in N. 42° 29', W. 49° 20', had dense fog from 7.30 a. m. to 10.30 a. m.

20th.—The s. s. "Manitoban," in N. 42° 38', W. 52° 12', had dense fog from 8 a. m. to 10.45 a. m. The s. s. "Mareca," in N. 44° 30', W. 45° 30', had dense fog from 5.30 p. m. to 8.15 p. m.

In each of the instances above cited the fog-areas were encountered in the second, or southeast, quadrant of areas of low barometric pressure, and along the southern edge of the ice-field, with wind blowing from the southwest quadrant along the course of the Gulf Stream. It would therefore appear that the causes which contributed to the formation of fog during this month existed, as in previous months, in the southeast quarter of cyclonic areas; while an additional and obvious cause of fog formation appeared in the intermingling of warm, humid air from the Gulf Stream and the colder air over, and along the southern edge of, the ice-field.

TEMPERATURE OF THE AIR.

[Expressed in degrees, Fahrenheit.]

The distribution of mean temperature over the United States and Canada for February, 1887, is exhibited on chart ii by the dotted isothermal lines; and in the table of miscellaneous data are given the monthly mean temperatures, with the departures from the normal, for the various stations of the Signal Service. On chart iv the departures from the normal are illustrated by lines connecting stations of normal or equal abnormal values.

The mean temperature of the month is below the normal in Maine, the upper lake region, and from thence westward to the Pacific; it also below in Nevada, California, and western Arizona. In the southern and southeastern districts of the United States it is above the normal. The most noteworthy feature in connection with the temperature of the month is the unusually cold weather that has prevailed in Dakota, Montana, and Idaho; at stations in these territories the mean temperature of the month ranges from 10° to 20° below the normal. The mean of the month is also largely below the normal in Washington Territory, Oregon, and California. The greatest departures in excess of the normal occur in the south Atlantic and Gulf states, Tennessee, and Florida, in this region the means of the month average about six degrees higher than the usual February temperature.

RANGES OF TEMPERATURE.

The monthly, and the greatest and least daily, ranges of temperature, are given in the table of miscellaneous meteorological data.

The following are some of the greatest and least monthly ranges at Signal Service stations:

Greatest.		Least.	
Fort Assinaboine, Montana.....	101.5	Key West, Florida.....	23.4
Holena, Montana.....	101.5	Galveston, Texas.....	27.5
Fort Maginnis, Montana.....	98.1	Tatoosh Island, Washington Ter.....	32.3
Fort Buford, Dakota.....	88.4	Hatteras, North Carolina.....	33.4
Bismarck, Dakota.....	88.0	San Diego, California.....	33.5
Poplar River, Montana.....	87.8	San Francisco, California.....	33.9
Deadwood, Dakota.....	86.9	Neah Bay, Washington Ter.....	35.0

DEVIATIONS FROM NORMAL TEMPERATURES.

In the table below are given, for certain stations, as reported by voluntary observers, the normal temperatures of

February for a series of years, the mean temperature for February, 1887, and the departures from the normal:

Station.	County.	Normal temperature for February.	Number of years.	Mean temperature for Feb., 1887.	Departure.
<i>Arkansas.</i>					
Lead Hill.....	Boone.....	38.8	5	43.3	+ 4.5
<i>California.</i>					
Fall Brook.....	San Diego.....	48.1	11	48.5	+ 0.4
Sacramento.....	Sacramento.....	49.7	21	43.7	- 6.0
<i>Connecticut.</i>					
Middletown.....	Middlesex.....	26.8	29	28.4	+ 1.6
New Haven.....	New Haven.....	28.2	101	29.8	+ 1.6
Thompson.....	Windham.....	26.2	30	24.8	- 1.4
Waterbury.....	New Haven.....	27.6	12	26.1	- 1.5
<i>Florida.</i>					
Archer.....	Alachua.....	58.6	4	58.9	+ 0.3
<i>Illinois.</i>					
Collinsville.....	Madison.....	31.6	8	36.6	+ 5.0
Mattoon.....	Coles.....	31.3	7	38.0	+ 6.7
Peoria.....	Peoria.....	29.4	31	32.7	+ 3.3
Riley.....	McHenry.....	21.8	26	21.6	- 0.2
Sycamore.....	De Kalb.....	21.9	6	23.4	+ 1.5
<i>Indiana.</i>					
Lafayette.....	Tippecanoe.....	29.2	8	31.5	+ 2.3
Logansport.....	Cass.....	28.5	33	32.9	+ 4.4
Mauzy.....	Rush.....	28.1	7	32.6	+ 4.5
Vevay.....	Switzerland.....	35.9	21	41.3	+ 5.4
<i>Iowa.</i>					
Cresco.....	Howard.....	17.8	10	13.1	- 4.7
Monticello.....	Jones.....	21.4	34	19.5	- 1.9
Muscatoine.....	Muscatoine.....	24.4	49	23.4	- 1.0
<i>Kansas.</i>					
Independence.....	Montgomery.....	35.1	16	35.2	+ 0.1
Wellington.....	Sumner.....	32.3	9	34.9	+ 2.6
<i>Louisiana.</i>					
Grand Coteau.....	Saint Landry.....	54.6	4	64.6	+ 10.0
<i>Maine.</i>					
Belfast.....	Waldo.....	22.3	28	20.3	- 2.0
Cornish.....	York.....	22.5	30	19.1	- 3.4
Gardner.....	Kennebec.....	20.5	51	19.8	- 0.7
Orono.....	Penobscot.....	18.9	19	17.8	- 1.1
<i>Maryland.</i>					
Fallston.....	Harford.....	31.9	16	35.3	+ 3.4
<i>Massachusetts.</i>					
Cambridge.....	Middlesex.....	26.1	65	26.8	+ 0.7
Fitchburg.....	Worcester.....	24.1	31	24.1	0.0
New Bedford.....	Bristol.....	28.9	75	29.4	+ 0.5
Somerset.....	Bristol.....	27.4	17	30.1	+ 2.7
Springfield.....	Hampden.....	25.7	20	26.7	+ 1.0
Taunton.....	Bristol.....	28.0	16	30.1	+ 2.1
Williamstown.....	Berkshire.....	22.4	34	24.0	+ 1.6
<i>Nevada.</i>					
Carson City.....	Ormsby.....	32.9	8	27.5	- 5.4
<i>New Brunswick.</i>					
Saint John.....	Saint John.....	18.1	27	18.1	0.0
<i>New Hampshire.</i>					
Concord.....	Morrismac.....	24.4	19	24.0	- 0.4
Hanover.....	Grafton.....	18.8	24	18.2	- 0.6
<i>New Jersey.</i>					
South Orange.....	Essex.....	29.8	17	32.7	+ 2.9
<i>New York.</i>					
Factoryville.....	Tioga.....	23.9	5	28.9	+ 5.0
North Volney.....	Oswego.....	22.1	19	22.8	+ 0.7
Palermo.....	Oswego.....	21.1	33	20.9	- 0.2
<i>Ohio.</i>					
Wauseon.....	Fulton.....	25.4	17	28.3	+ 2.9
<i>Pennsylvania.</i>					
Dyberry.....	Wayne.....	22.6	23	25.9	+ 3.3
<i>South Carolina.</i>					
Stateburg.....	Sumter.....	51.1	7	54.1	+ 3.0
<i>Texas.</i>					
New Ulm.....	Austin.....	56.0	14	59.2	+ 3.2
<i>Vermont.</i>					
Lunenburg.....	Essex.....	17.2	39	15.0	- 2.2
Newport.....	Orleans.....	17.6	12	15.0	- 2.6
Strafford.....	Orange.....	17.9	12	17.5	- 0.4
<i>Virginia.</i>					
Bird's Nest.....	Northampton.....	41.9	19	44.4	+ 2.5
Dale Enterprise.....	Rockingham.....	35.3	7	42.0	+ 6.7
Variety Mills.....	Nelson.....	38.5	10	40.6	+ 2.1
Wytheville.....	Wythe.....	37.1	23	40.0	+ 2.9
<i>West Virginia.</i>					
Helvetia.....	Randolph.....	34.9	10	42.0	+ 7.1
<i>Wisconsin.</i>					
Delavan.....	Walworth.....	16.4	4	21.4	+ 5.0

• From the "Bulletin of the New England Meteorological Society."

The following notes, in connection with this subject, are furnished by voluntary observers:

Arkansas.—Lead Hill, Boone county: the mean temperature of the winter of 1886-'87, 36° 7', is 1° 3' above the winter average of the past five years.

Illinois.—Riley, McHenry county: the mean temperature of the winter of 1886-'87, 16° 0', is 4° 5' below the mean of twenty-four winters past; the winters only of 1872-'73, 1874-'75, 1878-'79, 1880-'81, 1882-'83, and 1884-'85 were colder. Highest temperature of the past winter, 50° 4', on December 11th; lowest, -24° 9', on January 7th; range for the winter, 75° 3'.

Indiana.—Mauzy, Rush county: during February of the past seven years the highest monthly mean, 38° 2', occurred in 1882; the lowest mean, 14° 8', in 1885.

Kansas.—Wellington, Sumner county: during February of the past nine

years the highest monthly mean temperature, 40° 1, occurred in 1882; the lowest mean, 24° 6, in 1885; the maximum temperature of the present month, 78° 0, is the highest that has occurred in February during that time; the lowest temperature for February, -15° 5, occurred in 1883.

Maryland.—Fallston, Harford county: during the past sixteen years the coldest February occurred in 1875, mean temperature, 23° 7; the warmest in 1880, mean, 37° 8.

New Jersey.—South Orange, Essex county: the mean temperature of the past winter, 30° 3, is 0° 5 above the average of the past seventeen years.

New York.—Palermo, Oswego county: during the past thirty-three years the coldest February occurred in 1875, mean temperature, 12° 7; the warmest in 1859, mean, 27° 8.

North Volney, Oswego county: during February in the past nineteen years the highest monthly mean, 28° 4, occurred in 1882, the lowest mean, 12° 4, in 1886; the mean temperature of the winter of 1886-'87, 21° 1, is 1° 9 below the average of the past nineteen years.

Ohio.—Wauseon, Fulton, county: the highest February mean temperature in the past seventeen years, 35° 4, occurred in 1882; the lowest mean, 11° 3, in 1875; the February extremes for that time are 62° 7, in 1880, and -24° 3, in 1885. The mean temperature of the past winter, 22° 6, is 2° 4 below the average.

South Carolina.—Stateburg, Sumter county: the following table shows the mean, maximum, and minimum temperatures of February for seven years:

	1881.	1882.	1883.	1884.	1885.	1886.	1887.
Mean	51.9	55.0	54.7	55.2	41.8	44.7	54.1
Maximum	70.0	74.0	78.0	75.0	64.0	68.0	74.0
Minimum	26.0	29.0	34.0	21.0	16.0	14.0	31.0

Texas.—New Ulm, Austin county: the extreme temperatures for February during the past fourteen years, are 88° 0, in 1883, and 16° 0, also in 1883.

Vermont.—Stratford, Orange county: during the past twelve years the highest February mean temperature, 25° 7, occurred in 1877; the lowest mean, 11° 0, in 1885.

Virginia.—Dale Enterprise, Rockingham county: during the past seven years the warmest February mean temperature, 42° 4, occurred in 1883; the coldest mean, 23° 9, in 1885.

Variety Mills, Nelson county: during February of the past ten years the highest monthly mean temperature, 43° 4, occurred in 1884; the lowest, 29° 6, in 1885. The mean temperature of the winter of 1886-'87, 34° 7, is 1° 8 below the average for the corresponding period of the last ten years.

In the following table are given the mean temperatures for the several geographical districts, with the normals and departures, as deduced from Signal Service observations:

Average temperatures for February.

Districts.	Average for February, Signal-Service observations.		Comparison of Feb., 1887, with the average for several years.
	For several years.	For 1887.	
New England	26.4	26.4	0.0
Middle Atlantic States	35.6	39.2	+ 3.6
South Atlantic States	49.7	54.8	+ 5.1
Florida Peninsula	64.9	67.9	+ 3.0
Eastern Gulf States	52.4	59.1	+ 6.7
Western Gulf States	51.3	56.2	+ 4.9
Rio Grande Valley	62.0	67.6	+ 5.6
Tennessee	43.2	49.8	+ 6.6
Ohio Valley	35.3	39.1	+ 3.8
Lower Lake region	26.8	27.7	+ 0.9
Upper Lake region	20.0	18.5	- 1.5
Extreme Northwest	8.7	- 1.0	- 9.7
Upper Mississippi Valley	27.9	26.5	- 1.4
Missouri Valley	22.8	15.5	- 7.3
Northern slope	22.3	9.2	- 13.1
Middle slope	32.5	33.5	+ 1.0
Southern slope	44.9	47.2	+ 2.3
Southern plateau	45.9	45.7	- 0.2
Middle plateau	34.1	31.5	- 2.6
Northern plateau	31.6	24.3	- 7.3
North Pacific coast region	41.2	32.4	- 8.8
Middle Pacific coast region	50.7	45.0	- 5.7
South Pacific coast region	56.2	53.5	- 2.7

The following are some of the most marked departures from the normal temperature at Signal Service stations:

Above normal.		Below normal.	
Mobile, Alabama	8.2	Walla Walla, Washington Territory	20.2
Knoxville, Tennessee	8.1	Fort Assinaboine, Montana	19.5
Sanford, Florida	7.5	Helena, Montana	18.6
New Orleans, Louisiana	7.4	Fort Bidwell, California	15.7
Kitty Hawk, North Carolina	7.3	Bismarck, Dakota	14.7
Montgomery, Alabama	7.2	Fort Buford, Dakota	14.7
Pensacola, Florida	7.1	Valentine, Nebraska	14.0
Nashville, Tennessee	6.9	Fort Maginnis, Montana	11.3

Table of comparative maximum and minimum temperatures for February.

State or Territory.	Station.	For 1887.		Since establishment of station.			
		Max.	Min.	Max.	Year.	Min.	Year.
Alabama	Mobile	80.5	36.0	78.0	1883	19.3	1886
Do	Montgomery	78.7	34.0	81.2	1883	14.4	1886
Arizona	Prescott	71.0	12.6	80.0	1879	11.0	1880
Do	Fort Apache	71.5	12.6	74.0	1881	9.0	1885
Arkansas	Fort Smith	75.1	19.9	78.4	1883	7.6	1886
Do	Little Rock	72.0	23.0	77.0	1882	35.0	1883, 1884
California	San Francisco	67.0	33.1	71.0	1884, 1886	35.0	1886
Do	San Diego	76.0	38.5	82.6	1883	35.0	1886
Colorado	Denver	70.9	2.6	72.0	1879	30.0	1883
Do	Pike's Peak	26.9	23.0	29.0	1876	30.0	1884
Connecticut	New Haven	53.0	8.0	65.0	1880	7.7	1886
Do	New London	53.6	9.8	62.0	1880	7.7	1886
Dakota	Fort Buford	47.2	41.2	57.0	1882	40.0	1883, 1884
Do	Yankton	50.4	22.4	58.0	1876	24.8	1886
District of Columbia	Washington City	72.0	18.6	78.0	1874	2.3	1886
Florida	Jacksonville	83.6	38.2	83.0	1876, 1883	24.3	1886
Do	Key West	81.0	57.6	87.0	1874	52.3	1886
Georgia	Atlanta	73.8	28.9	74.5	1883	8.0	1885
Do	Savannah	79.7	34.9	79.0	'76, '80, '83	10.0	1886
Idaho	Boise City	53.4	6.1	65.4	1886	8.5	1884
Illinois	Chicago	72.4	11.5	74.0	1880	2.6	1886
Do	Chicago	58.0	7.0	63.0	1883	13.7	1885
Indiana	Indianapolis	66.2	10.5	72.0	1883	9.0	1885
Indian Territory	Fort Sill	71.6	8.1	79.0	1879, 1880	5.0	1886
Iowa	Dubuque	50.6	12.5	67.2	1882	31.0	1875
Do	Des Moines	53.6	15.0	68.0	1880	23.0	1883
Kansas	Dodge City	75.0	8.2	78.0	1876	20.0	1883
Do	Leavenworth	68.4	6.0	73.0	1876	16.2	1885
Kentucky	Louisville	77.9	19.2	77.5	1883	1.3	1885
Louisiana	New Orleans	81.5	44.0	80.0	1883	25.0	1886
Do	Shreveport	78.2	34.5	83.5	1876	14.6	1885
Maine	Ennetport	47.2	4.2	47.0	1874, 1878	20.0	1876
Do	Portland	41.9	2.5	58.0	1880	10.2	1886
Maryland	Baltimore	72.2	20.9	78.0	1874	1.1	1886
Massachusetts	Boston	47.6	5.2	64.0	1880	6.6	1886
Michigan	Marquette	35.5	13.0	69.0	1877	27.0	1875
Do	Grand Haven	46.0	7.3	58.0	1880	24.0	1875
Minnesota	Saint Vincent	28.5	38.0	49.5	1886	39.2	1885
Do	Saint Paul	42.8	26.7	59.0	1880	32.0	1875
Mississippi	Vicksburg	79.6	37.7	82.0	1880	16.0	1886
Missouri	Saint Louis	74.1	3.9	73.2	1882	7.9	1886
Montana	Fort Assinaboine	46.1	55.4	63.2	1886	47.0	1883
Do	Helena	61.0	40.5	62.1	1886	32.0	1883
Nebraska	North Platte	59.0	16.1	68.3	1882	29.0	1883
Do	Omaha	59.0	15.5	66.0	1880	24.9	1883
Nevada	Winnemucca	51.2	1.2	69.0	1879	17.0	1882
New Hampshire	Mount Washington	33.2	26.0	43.0	1883	42.0	1876
New Jersey	Atlantic City	57.8	16.7	71.0	1880	5.0	1875
New Mexico	Santa Fe	61.8	8.7	75.0	1879	3.0	1880
New York	Buffalo	54.1	6.3	63.8	1883	13.0	1875
Do	New York City	63.0	16.6	69.0	1874	4.0	1873
North Carolina	Charlotte	70.8	25.7	76.5	1883	5.9	1886
Do	Wilmington	75.0	27.2	81.0	1880	10.0	1886
Ohio	Cincinnati	70.0	14.7	73.0	1883	9.6	1885
Do	Sandusky	60.5	8.5	70.0	1883	28.0	1884
Oregon	Portland	63.0	9.1	65.0	1886	7.0	1883
Do	Roseburg	70.0	7.0	72.1	1886	3.3	1884
Pennsylvania	Pittsburg	66.6	15.1	76.5	1883	10.0	1875
Do	Philadelphia	65.6	18.0	75.0	1874	2.4	1886
Rhode Island	Block Island	54.1	11.8	54.0	1884	1.0	1886
South Carolina	Charleston	80.4	33.9	78.0	1876, 1880, 1882, 1883	13.3	1886
Tennessee	Knoxville	72.8	21.6	79.0	1871	4.1	1886
Do	Memphis	74.0	26.0	79.0	1883	5.8	1886
Texas	Brownsville	80.8	40.0	84.6	1884	27.0	1883
Do	Fort Elliott	77.2	3.1	78.0	1880	10.0	1883
Utah	Salt Lake City	53.4	13.0	68.0	1879	13.0	1884
Virginia	Lynchburg	72.2	20.0	75.0	1874	1.3	1886
Do	Norfolk	75.0	26.8	81.0	1871	3.5	1886
Washington Ter.	Spokane Falls	52.6	11.0	55.3	1886	17.8	1884
Do	Olympia	53.5	2.4	61.0	1886	2.0	1884
Wisconsin	La Crosse	44.5	18.6	65.0	1882	34.0	1875
Do	Milwaukee	48.6	9.4	60.0	1882	23.6	1885
Wyoming	Cheyenne	59.0		59.0	'79, '80, '81	28.2	1884

FROSTS.

Frosts occurred in the various districts on the following dates:

New England.—1st to 28th.

Middle Atlantic states.—1st to 28th.

South Atlantic states.—1st, 5th, 12th, 14th, 17th, 23d, 25th, 27th, 28th.

Florida.—Archer, Alva, and Duke, 28th.

East Gulf states.—Atlanta, Georgia, 12th, 13th; Tallahassee, Florida, 16th; Greensborough, Livingston, and Mobile, Alabama, Pensacola, Florida, and Vicksburg, Mississippi, 28th.

West Gulf states.—1st to 4th, 21st, 22d, 27th, 28th.

Tennessee.—1st, 3d, 4th, 5th, 11th, 12th, 13th, 19th, 22d, 25th, 27th, 28th.

Ohio Valley.—1st to 6th, 9th to 15th, 17th to 28th.

Lower lake region.—1st to 28th.

Upper lake region.—1st to 28th.

Extreme northwest.—1st to 28th.

Upper Mississippi valley.—1st to 28th.
Missouri Valley.—1st to 28th.
Northern slope.—1st to 28th.
Middle slope.—1st to 28th.
Southern slope.—3d to 6th, 8th, 9th, 11th to 15th, 17th to 28th.
Southern plateau.—1st to 5th, 7th to 28th.
Middle plateau.—1st to 28th.
Northern plateau.—1st to 28th.
North Pacific coast region.—1st to 28th.
Middle Pacific coast region.—2d, 3d, 5th, 6th, 7th, 10th, 14th to 20th, 22d, 23d, 25th to 28th.
South Pacific coast region.—Riverside, California, 3d, 4th, 5th, 11th, 12th, 17th, 18th, 20th, 21st, 23d, 24th; Fall Brook, California, 3d, 4th, 12th, 17th, 21st; Los Angeles, California, 4th, 21st to 25th; San Diego, California, 17th, 19th.

ICE.

Ice formed on calm water in the southern districts of the country on the following dates:

Arizona.—Maricopa, 21st, 23d.
California.—Sacramento, 3d, 7th, 16th, 19th, 25th, 26th; San Francisco, 20th, 22d, 25th, 26th; San Diego, 19th; Nicolaus, 25th.
Texas.—San Antonio, 4th.

LOW TEMPERATURES.

Fort Assinaboine, Montana: on the 2d the barometer was high, and almost stationary; mean reduced for the day 30.79, which is the highest on record at this station; on the night of the 2-3d the minimum thermometer registered $-55^{\circ}.4$; this is the lowest temperature on record at this station. Reports from the cattle ranges state that many cattle were dying from the effects of extreme cold weather. Stage coaches were delayed three or four days on account of deep snow drifts. The observer at Fort Maginnis, Montana, states that on the 2d and 3d very high pressure, with heavy northwest winds and low temperature, prevailed; minimum on the 2d $-42^{\circ}.0$, the lowest known at this place. In the vicinity of Fort Maginnis, and over the entire territory, large numbers of cattle perished from cold and starvation. At Poplar River, Montana, the temperature on the 2d was $-26^{\circ}.0$, and on the 3d $-44^{\circ}.6$, with strong westerly winds prevailing. Numbers of cattle in the vicinity perished from cold.

PRECIPITATION.

[Expressed in inches and hundredths.]

The distribution of precipitation over the United States and Canada for February, 1887, as determined from the reports of about six hundred stations, is exhibited on chart iii, and in the table of miscellaneous data are given, for Signal Service stations, the total precipitation, with the departures from the normal.

The precipitation for February, 1887, is above the normal in all parts of the United States, except South Carolina, Georgia, Florida, Louisiana, Montana, and parts of Texas, Arkansas, Washington Territory, and Oregon. The excess is especially large in California and southern Oregon; in the former state the precipitation of the month is about twice the usual amount for February. A large part of this excessive precipitation fell on the 3d-4th, 8-9th, and 14th, a number of stations in California reporting on these dates a fall of over two inches, and several of over three inches, in twenty-four hours. The excess is also large in the Lake region and Ohio Valley, in the former district the precipitation of the month is more than twice the normal amount, a considerable part of this fell during the prevalence of low-area number v on the 10th and 11th; on those days a number of stations reported a fall of over two inches in less than thirty-six hours. The greatest deficiency of rainfall occurs in Florida, where the amount for the month is very small, few stations reporting over 0.90.

The following are some of the most marked departures from the normal precipitation at Signal Service stations:

Above normal.		Below normal.	
	Inches.		Inches.
Los Angeles, California.....	5.75	Portland, Oregon.....	4.58
Sandusky, Ohio.....	5.62	Olympia, Washington Territory.....	4.52
San Francisco, California.....	5.60	Hatteras, North Carolina.....	3.57
Port Huron, Michigan.....	5.40	Cedar Keys, Florida.....	3.19
Erie, Pennsylvania.....	5.24	Jacksonville, Florida.....	3.06
Cleveland, Ohio.....	5.10	Charleston, South Carolina.....	1.30
Toledo, Ohio.....	4.96	Norfolk, Virginia.....	1.29

DEVIATIONS FROM AVERAGE PRECIPITATION.

The following table shows, for certain stations, as reported by voluntary observers, the average precipitation for the month of February for a series of years, the precipitation for February 1887, and the departures from the average:

Station.	County.*	Average precipitation for Feb.	Number of years.	Precipitation for Feb., 1887.	Departure.
		Inches.		Inches.	Inches.
<i>Arkansas.</i>					
Lead Hill.....	Boone.....	6.43	5	4.68	- 2.35
<i>California.</i>					
Fall Brook.....	San Diego.....	3.74	12	5.65	+ 1.91
Sacramento.....	Sacramento.....	3.19	21	5.89	+ 2.70
Santa Barbara.....	Santa Barbara.....	3.89	20	5.64	+ 4.75
<i>Connecticut.</i>					
Canton *.....	Hartford.....	3.84	25	5.37	+ 1.53
Hartford *.....	Hartford.....	3.72	15	5.62	+ 1.90
Middletown *.....	Middlesex.....	4.15	29	7.56	+ 3.41
Wallingford *.....	New Haven.....	4.35	29	7.16	+ 2.81
<i>Florida.</i>					
Archer.....	Alachua.....	2.74	4	0.38	- 2.36
<i>Illinois.</i>					
Collinsville.....	Madison.....	3.04	5	4.60	+ 1.56
Mattoon.....	Coles.....	5.15	7	4.25	- 0.90
Peoria.....	Peoria.....	2.15	31	5.45	+ 3.30
Riley.....	McHenry.....	1.68	24	4.82	+ 3.16
Sycamore.....	De Kalb.....	2.82	6	4.50	+ 1.68
<i>Indiana.</i>					
Lafayette.....	Tippecanoe.....	3.53	8	2.94	- 0.59
Logansport.....	Cass.....	2.75	33	5.15	+ 2.40
Mauzy.....	Rush.....	4.89	7	6.28	+ 1.39
Vevay.....	Switzerland.....	3.65	21	8.28	+ 4.63
<i>Iowa.</i>					
Cresco.....	Howard.....	0.95	15	1.88	+ 0.93
Monticello.....	Jones.....	1.92	34	4.62	+ 2.70
Muscatine.....	Muscatine.....	1.77	40	4.12	+ 2.35
<i>Kansas.</i>					
Independence.....	Montgomery.....	2.17	15	1.55	- 0.62
Wellington.....	Sumner.....	1.12	9	1.18	+ 0.06
<i>Maine.</i>					
Gardiner *.....	Kennebec.....	3.59	49	5.62	+ 2.03
Orono *.....	Penobscot.....	3.99	19	5.89	+ 1.90
<i>Maryland.</i>					
Fallston.....	Harford.....	4.00	16	4.46	+ 0.46
<i>Massachusetts.</i>					
Cambridge *.....	Middlesex.....	3.60	46	4.96	+ 1.36
Chestnut Hill *.....	Middlesex.....	4.44	12	4.44	0.00
Framingham *.....	Middlesex.....	4.14	13	5.07	+ 0.93
Lake Cochituate *.....	Middlesex.....	3.65	36	5.34	+ 1.69
Lynn *.....	Essex.....	3.94	13	4.98	+ 1.04
Mythic Lake *.....	Middlesex.....	4.15	12	4.43	+ 0.28
New Bedford *.....	Bristol.....	3.28	74	6.25	+ 2.97
Somerset.....	Bristol.....	3.63	17	3.92	+ 0.29
Springfield *.....	Hampden.....	3.53	40	5.23	+ 1.70
Waltham *.....	Middlesex.....	2.71	58	4.66	+ 1.95
Williamstown *.....	Berkshire.....	2.59	21	4.50	+ 1.91
<i>Nevada.</i>					
Carson City.....	Ormsby.....	1.43	8	3.27	+ 1.84
<i>New Brunswick.</i>					
Saint John *.....	Saint John.....	4.77	17	7.60	+ 2.83
<i>New Hampshire.</i>					
Concord *.....	Merrimac.....	2.66	31	4.86	+ 2.20
Hanover *.....	Grafton.....	2.11	22	7.67	+ 5.56
<i>New Jersey.</i>					
South Orange.....	Essex.....	3.75	17	5.07	+ 1.32
<i>New York.</i>					
Factorville.....	Tioga.....	2.05	5	2.88	+ 0.83
Menand's.....	Albany.....	2.16	4	3.40	+ 1.24
Palermo.....	Oswego.....	2.93	33	2.03	- 0.90
<i>Ohio.</i>					
Wauseon.....	Fulton.....	2.77	13	7.19	+ 4.42
<i>Pennsylvania.</i>					
Dyberry.....	Wayne.....	2.85	18	4.89	+ 2.04
<i>South Carolina.</i>					
Kirkwood.....	Kershaw.....	3.46	20	2.27	- 1.19
Stateburg.....	Sumter.....	2.21	6	1.89	- 0.32
<i>Texas.</i>					
New Ulm.....	Austin.....	4.53	15	2.60	- 2.53
<i>Vermont.</i>					
Lunenburg *.....	Essex.....	2.91	39	3.80	+ 0.89
Newport *.....	Orleans.....	2.89	12	4.75	+ 1.86
Strafford.....	Orange.....	3.04	12	5.90	+ 2.86
<i>Virginia.</i>					
Bird's Nest.....	Northampton.....	3.61	18	3.85	+ 0.24
Dale Enterprise.....	Rockingham.....	3.47	7	4.72	+ 1.25
Variety Mills.....	Nelson.....	3.61	8	3.91	+ 0.30
Wytheville.....	Wythe.....	3.32	22	3.50	+ 0.18
<i>West Virginia.</i>					
Helvetia.....	Randolph.....	4.80	10	7.68	+ 2.88

* From the "Bulletin of the New England Meteorological Society."